

1 **CLAIM AMENDMENT(S)**

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3 1. (original) A system comprising:

4 a forwarding component that forwards packets;

5 a classifying component that classifies packets and is capable of classifying

6 packets for the forwarding component;

7 a session tracking component that tracks sessions for at least one of the

8 forwarding component and the classifying component;

9 a health and load handling component that is capable of providing health

10 and load information to the classifying component; and

11 a high availability mechanism that provides detection of, handling of, and

12 recovery from a failure of one or more of the forwarding component, the

13 classifying component, the session tracking component, and the health and load

14 handling component.

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16 2. (original) The system as recited in claim 1, wherein the system

17 further comprises:

18 a request routing component that is capable of routing logical requests;

19 wherein the high availability mechanism provides detection of, handling of,

20 and recovery from a failure of the request routing component.

1 3. (original) The system as recited in claim 1, wherein the high
2 availability mechanism provides detection of, handling of, and recovery from a
3 failure of the forwarding component; the high availability mechanism including
4 capabilities for detection of a failure at the forwarding component by at least one
5 load-balancing-aware switch, redirection of packets to at least one other
6 forwarding component, and rebuilding of lost routes with a distributed session
7 tracking manager.

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9 4. (original) The system as recited in claim 1, wherein the high
10 availability mechanism provides detection of, handling of, and recovery from a
11 failure of the classifying component; the high availability mechanism including
12 capabilities for detection of a failure at the classifying component by at least one
13 forwarding component, redirection of packets to at least one other classifying
14 component, and rebuilding of lost session information with a distributed session
15 tracking manager.

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17 5. (original) The system as recited in claim 1, wherein the high
18 availability mechanism provides detection of, handling of, and recovery from a
19 failure of the session tracking component; the high availability mechanism
20 including capabilities for detection of a failure at the session tracking component
21 by at least one forwarding component and/or classifying component and for
22 distributed and redundant storage of session information.

1 6. (original) The system as recited in claim 1, wherein the high
2 availability mechanism provides detection of, handling of, and recovery from a
3 failure of the health and load handling component; the high availability mechanism
4 including capabilities for detection of a failure at the health and load handling
5 component by at least one classifying component and for rebuilding of a cache of
6 health and load information using a message protocol.

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8 7. (original) The system as recited in claim 1, wherein the high
9 availability mechanism provides detection of, handling of, and recovery from a
10 failure of the health and load handling component; the high availability mechanism
11 including capabilities for redundant storing of health and load information and for
12 authoritative storing of health and load information at hosts to which the health
13 and load information pertains.

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15 8. (original) The system as recited in claim 1, wherein the forwarding
16 component, the classifying component, the session tracking component, and the
17 health and load handling component are resident at and executing on at least two
18 different devices.

1 9. (original) An arrangement for highly available network load
2 balancing infrastructure, the arrangement comprising:

3 a plurality of different means for load balancing network traffic;
4 detection means for detecting a failure of one or more of the plurality of
5 different means for load balancing;

6 handling means for handling the failure; and
7 recovery means for recovering from the failure.

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9 10. (original) The arrangement as recited in claim 9, wherein the
10 plurality of different means for load balancing includes at least one forwarder
11 means for forwarding packets.

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13 11. (original) The arrangement as recited in claim 9, wherein the
14 plurality of different means for load balancing includes at least one classifier
15 means for classifying packets.

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17 12. (original) The arrangement as recited in claim 9, wherein the
18 plurality of different means for load balancing includes at least one request router
19 means for routing packets on a request-level.

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21 13. (original) The arrangement as recited in claim 9, wherein the
22 plurality of different means for load balancing includes at least one session tracker
23 means for tracking sessions.

1 **14.** (original) The arrangement as recited in claim 9, wherein the
2 plurality of different means for load balancing includes at least one health and load
3 handler means for handling health and load information.

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5 **15.** (original) The arrangement as recited in claim 9, wherein the
6 arrangement comprises at least one system.

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8 **16.** (original) The arrangement as recited in claim 9, wherein the
9 arrangement comprises one or more processor-accessible media.

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11 **17.** (original) A network load balancing system comprising:
12 a first device that includes forwarding functionality; and
13 a second device that includes classifying functionality, the classifying
14 functionality performing classifying for the forwarding functionality;
15 wherein hardware of the first device differs from hardware of the second
16 device.

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18 **18.** (original) The network load balancing system as recited in claim 17,
19 wherein the hardware of the first device is especially tuned for the forwarding
20 functionality, and the hardware of the second device is especially tuned for the
21 classifying functionality.

1 **19.** (original) The network load balancing system as recited in claim 17,
2 wherein the hardware of the first device has a relatively greater ability to
3 accommodate a high packet flux, and the hardware of the second device has a
4 relatively greater ability to accommodate processing-intensive tasks.

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6 **20.** (original) The network load balancing system as recited in claim 17,
7 wherein the hardware of the first device comprises a router or switch, and the
8 hardware of the second device comprises a personal computer or server.

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10 **21. - 74.** (canceled)